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**APPENDIX J**

**DETAILED DESCRIPTION OF THE CAISO CHANGES TO  
THE PROJECT**

On November 12, 2024, the California Independent System Operator (CAISO) Board of Governors approved modification of the Power Santa Clara Valley Project (Project) to increase the power injection at the San Jose B substation to 1,000 megawatts (MW) from 500 MW to better meet reliability demands resulting from an expected increase in load growth and the transition to a more robust long-term plan for the South Bay. This modification requires limited changes to the Grove and Skyline terminals and the proposed Skyline to San Jose B overhead tie line. In addition, changes to certain Interconnection Facilities at the San Jose B substation that will be the responsibility of Pacific Gas and Electric Company (PG&E) are necessary to implement the modifications. Together, the changes are generally minor adjustments to the originally proposed equipment and facilities within the same or similar limits of construction at the HVDC terminals and interconnecting substations. Below is a detailed description of the resultant changes to the Grove and Skyline terminals, the Skyline to San Jose B overhead tie line, and certain Interconnection Facilities at the San Jose B substation.

### **1) Modifications to the Grove and Skyline Terminals**

- a. Removal of the future multi-terminal HVDC expansion areas.
- b. Replacement of the enclosed gas-insulated switchgear (GIS) alternating current (AC) switchyard, originally comprised of three breakers in a breaker-and-a-half (BAAH) configuration, with a single AC circuit breaker and associated minor equipment.
- c. Adjustments to terminal equipment to accommodate the voltage change at Skyline and increased power injection capability.
- d. Expansion of the Skyline terminal within already disturbed, vacant property:
  - i. Permanent impact area increases from 5.1 acres to approximately 5.5 acres.
  - ii. Fenced area increases from 4.5 acres to approximately 5.2 acres.
  - iii. Temporary impact area at Skyline terminal and adjacent PG&E San Jose B substation expansion increases from 8.0 acres to approximately 8.5 acres for construction staging and work area during construction.
- e. **Revised Figure 3-7, HVDC Terminal General Arrangements**, provides the modified site plans.

## 2) PG&E's San Jose B Substation Rebuild & Expansion

- a. Construction of a new 230 kilovolt (kV) GIS switchyard in a BAAH configuration, including one new BAAH bay with future expansion capability to four BAAH bays, within a new GIS enclosure.
- b. Addition of a new 230/115 kV transformer.
- c. Integration of new infrastructure with overhead conductors and underground cables to connect with existing outdoor electrical equipment.
- d. Expansion of the existing substation fence line within already disturbed, vacant property to include the revised PG&E San Jose B Substation Rebuild & Expansion area, increasing the total permanent impact area from 2.8 acres to approximately 3.3 acres.

## 3) Modification of the Skyline to San Jose B Overhead Tie Line

- a. Upgrading the originally planned 115 kV overhead tie line to a 230 kV line to connect to PG&E's new 230 kV equipment.
- b. The 230 kV tie line would remain within the Skyline terminal and expanded San Jose B substation, maintaining approximately the same height as originally planned.

## 4) Construction Schedule Updates

- a. The modifications necessitate updates to the proposed construction schedule to allow the installation, testing, and commissioning of the Project and Interconnection Facilities by the CAISO's required in-service date as summarized in an updated table below.

**TABLE 1: PRELIMINARY PROPOSED CONSTRUCTION SCHEDULE**

Phase/Activity	Start Date	End Date
<b>HVDC Terminals Construction</b>		
Site development (includes survey, road work, site and staging area preparation)	March 2026	June 2026
Below-grade construction	July 2026	October 2026
Above-grade construction and equipment installing	November 2026	December 2027
Commissioning and testing	November 2027	May 2028
Post energization performance testing	June 2028	October 2028
<b>Transmission Line Construction</b>		
Construction mobilization and surveying	March 2026	February 2027
Grove to Skyline 320 kV DC Transmission Line	April 2026	January 2028

Phase/Activity	Start Date	End Date
Metcalf to Grove 500 kV AC Transmission Line	April 2026	November 2027
Commissioning and Testing	December 2027	February 2028
<b>Existing Substation Upgrades</b>		
PG&E Metcalf Substation	December 2026	May 2027
PG&E San Jose B Substation	December 2026	February 2028

**POWER SANTA CLARA VALLEY PROJECT**  
**Revised Figure 3-7 General Arrangement**  
**Grove Terminal**  
 City of San José, Santa Clara Co., CA

**LEGEND**

**Project Components**

- Metcalf to Grove 500 kV AC Transmission Line
- Grove to Skyline 320 kV DC Transmission Line
- Substation Connection
- Existing Distribution Line
- Terminal Distribution Getaway
- New Internet Service Provider
- Grove Terminal Site/Property Boundary (Limits of Construction)
- Exterior Access Road
- Terminal Perimeter Wall
- Frontage Vegetation to Remain
- Circuit Breaker
- Control Enclosure
- Converter Reactors
- Distribution Station Service
- Distribution Transformer
- HVDC Converter Enclosure
- PLC Filter
- Converter Transformers
- Spare Transformer
- Valve Coolers

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Feet

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













Sources: LSPGOC, 2023, Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community. Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

**POWER SANTA CLARA VALLEY PROJECT**  
**Revised Figure 3-7 General Arrangement**  
**Skyline Terminal**  
 City of San José, Santa Clara Co., CA

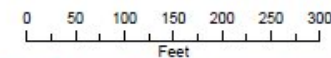
**LEGEND**

**Project Components**

- Grove to Skyline 320 kV DC Transmission Line
- Skyline to San Jose B 230 kV AC Transmission Line
- Substation Connection
- New Distribution Line
- New Internet Service Provider
-  Dead End Structure
-  Skyline Terminal Site Boundary (Limits of Construction)
-  Skyline Terminal Property Boundary
-  Exterior Access Road
-  Terminal Perimeter Wall
-  Circuit Breaker
-  Control Enclosure
-  Converter Reactors
-  Distribution Transformer
-  HVDC Converter Enclosure
-  PLC Filter
-  Converter Transformers
-  Spare Transformer
-  Valve Coolers
-  San Jose B Substation Rebuild/Expansion Area



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Source: LSPQC, 2023. Source: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community. Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community